

## **ABSTRACT**

### **Drought Predictability and Prediction in a Changing Climate: Assessing Current Predictive Knowledge and Capabilities, User Requirements and Research Priorities**

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Drought is fundamentally the result of an extended period of reduced precipitation lasting anywhere from a few weeks to decades and even longer. As such, addressing drought predictability and prediction in a changing climate requires foremost that we make progress on the ability to predict precipitation anomalies on subseasonal and longer time scales. From the perspective of the users of drought forecasts and information, drought is however most directly viewed through its impacts (e.g., on soil moisture, streamflow, crop yields). As such, the question of the predictability of drought must extend to those quantities as well.

In order to make progress on these issues, the WCRP drought information group (DIG), with the support of WCRP, the Catalan Institute of Climate Sciences, the La Caixa Foundation, the National Aeronautics and Space Administration, the National Oceanic and Atmospheric Administration, and the National Science Foundation, has organized a workshop to focus on:

1. User requirements for drought prediction information on sub-seasonal to centennial time scales
2. Current understanding of the mechanisms and predictability of drought on sub-seasonal to centennial time scales
3. Current drought prediction/projection capabilities on sub-seasonal to centennial time scales
4. Advancing regional drought prediction capabilities for variables and scales most relevant to user needs on sub-seasonal to centennial time scales.

This introductory talk provides an overview of these goals, and outlines the occurrence and mechanisms of drought world-wide.